

<u>IN THE UNITED STATES PATENT AND TRADEMARK OFFICE</u>

Applicants:

Andreas G. Uitterlinden et al. Attorney Docket No.: KILS121089

Application No.: 10/601,345

Group Art Unit: 1614

Filed:

June 19, 2003

Title:

ESTROGEN RECEPTOR ALLELES THAT ARE PREDICTIVE OF

INCREASED SUSCEPTIBILITY TO BONE FRACTURE

INFORMATION DISCLOSURE STATEMENT

Seattle, Washington 98101

TO THE COMMISSIONER FOR PATENTS:

Applicants are aware of the information listed in the attached form that may be material to the prosecution of the above-identified patent application.

- Copies of the listed patents, publications, and other information are enclosed for the Examiner's use.
- 2. Pursuant to 37 C.F.R. § 1.97(b), this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid and addressed to Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the below date.

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Attorney Docket No. KILS121089

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June 16, 2003

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ESTROGEN RECEPTOR ALLELES THAT ARE PREDICTIVE OF

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U.S. PATENT DOCUMENTS

*Examiner Cite		Kind	Date	•	
Initials	No.	Document No.	Code	(mm/dd/yyyy)	Name
	U1	5,593,833	A	01//1997	Morrison et al.
	_ U2	5,939,260	A	08//1999	Spector et al.

FOREIGN PATENT DOCUMENTS

*Examiner Cite			Kind	Publication Date		English Abstract Translation	
Initial	No.	Document No.	Code	(mm/dd/yyyy)	Country	Provided Provided	
	_ F1	WO 94/03633	A 1	02/17/1994	WIPO		
···	_ F2	WO 97/40187	A1	10/30/1997	WIPO		

OTHER INFORMATION

(Including Author, Title, Date, Pertinent Pages, Etc.)

*Examiner Initial	Cite No.	
	O1	Chango, A., et al., "5,10-Methylenetetrahydrofolate Reductase Common Mutations, Folate Status and Plasma Homocysteine in Healthy French Adults of the Supplementation en Vitamines et Mineraux Antioxydants (SU.VI.MAX) Cohort," <i>British Journal of Nutrition</i> 84:891-896, 2000.
	O2	Christensen, B., et al., "Correlation of a Common Mutation in the Methylenetetrahydrofolate Reductase Gene With Plasma Homocysteine in Patients With Premature Coronary Artery Disease," <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> 17(3):569-573, March 1997.

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O3	Cooper, G.S. and D.M. Umbach, "Are Vitamin D Receptor Polymorphisms Associated With Bone Density?, A Meta-Analysis," <i>J. Bone Miner. Res.</i> 11:1841-1849, 1996.
 O4	Goyette, P., et al., "Human Methylenetetrahydrofolate Reductase: Isolation of cDNA, Mapping and Mutation Identification," <i>Nature Genetics</i> 7:195-200, June 1994.
 O5	Goyette, P., et al., "Gene Structure of Human and Mouse Methylenetetrahydrofolate Reductase (MTHFR)," <i>Mammalian Genome 9</i> :652-656, 1998.
 O6	Grant, S.F.A., et al., "Reduced Bone Density and Osteoporosis Associated With a Polymorphic Sp1 Binding Site in the Collagen Type Iα1 Gene," <i>Nature Genetics</i> 14:203-205, October 1996.
 Ο7	Hofman, A., et al., "Determinants of Disease and Disability in the Elderly: The Rotterdam Elderly Study," <i>Eur. J. Epidemiol.</i> 7(4):403-422, July 1991.
 O8	Houston, L.A., et al., "Vitamin D Receptor Polymorphism, Bone Mineral Density, and Osteoporotic Vertebral Fracture: Studies in a UK Population," <i>Bone 18</i> (3):249-252, 1996.
 O9	Ioannidis, J.P.A., et al., "Association of Polymorphisms of the Estrogen Receptor Alpha Gene With Bone Mineral Density and Fracture Risk in Women: A Meta-Analysis," <i>J. Bone Miner. Res.</i> 17(11):2048-2060, 2002 [Abstract].
 O10	Mann, V., et al., "A <i>COL1A1</i> Sp1 Binding Site Polymorphism Predisposes to Osteoporotic Fracture by Affecting Bone Density and Quality," <i>J. Clin. Invest.</i> 107(7):899-907, April 2001.
 O11	Miyao, M., et al., "Association of Methylenetetrahydrofolate Reductase (MTHFR) Polymorphism With Bone Mineral Density in Postmenopausal Japanese Women," <i>Calcified Tissue Int'l</i> 66:190-194, 2000.
 O12	Moritsugu, K.P., et al., "Report of the Surgeon General's Workshop on Osteoporosis and Bone Health," <i>Proceedings of the Surgeon General's Workshop on Osteoporosis and Bone Health</i> , Washington, D.C., December 12-13, 2002, pp. 1-55.
O13	Morrison, N.A., et al., "Prediction of Bone Density From Vitamin D Receptor Alleles," <i>Nature 367</i> :284-287, 1994.
 O14	Ralston, S.H., "Genetic Markers of Bone Metabolism and Bone Disease," Scand. J. Clin. Lab. Invest. 57(Suppl. 227):114-121, 1997.

O15	Ralston, S.H., "The Genetics of Osteoporosis," Q.J. Med. 90:247-251, 1997.
O16	Uitterlinden, A.G., et al., "Interaction Between the Vitamin D Receptor Gene and Collagen Type Iα1 Gene in Susceptibility for Fracture," <i>J. Bone Miner. Res.</i> 16:379-385, 2001 [Abstract].
O17	Uitterlinden, A.G., et al., "A Large-Scale Population-Based Study of the Association of Vitamin D. Receptor Gene Polymorphisms With Bone Mineral Density," <i>J. Bone Miner. Res.</i> 11(9):1241-1248, 1996.
O18	Uitterlinden, A.G., et al., "Relation of Alleles of the Collagen Type Iα1 Gene to Bone Density and the Risk of Osteoporotic Fractures in Postmenopausal Women," <i>New Engl. J. Med.</i> 338(15):1016-1021, April 9, 1998.
O19	Uitterlinden, A.G., et al., "Sp1 Binding Site Polymorphism in the COLIA1 Gene Is Associated With BMD: The Rotterdam Study," <i>Osteoporosis Int'l</i> , 6(1):124, PSu164, 1996 [Abstract].
O20	Uitterlinden, A.G., Ph.D., et al., "Vitamin D Receptor Genotype Is Associated With Radiographic Osteoarthritis at the Knee," <i>J. Clin. Invest.</i> 100(2):259-263, 1997.
O21	Van der Klift, M., et al., "The Incidence of Vertebral Fractures in Men and Women: The Rotterdam Study," <i>J. Bone Miner. Res.</i> 17(6):1051-1056, 2002 [Abstract].
O22	White, C.P., et al., "Vitamin D Receptor Alleles Predict Osteoporotic Fracture Risk," <i>J. Bone Miner. Res.</i> 9(suppll):S263, 1994 [Abstract].
O23	Willing, M., et al., "Bone Mineral Density and its Change in White Women: Estrogen and Vitamin D Receptor Genotypes and Their Interaction," <i>J. Bone Miner. Res.</i> 13(4):695-705, 1998 [Abstract].
Examiner	Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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